, 1,			$\odot$	 !	Docket Number (Optional 0256003		Application Numb		
	INFC	RMATION DISCLOSUR	E C. ATION	;	Applicant(s) T. Rappaport et a		. 03	9/668,145	
	'	011	Eve		Piling Date		Group Art Unit	· · ·	
·	<u></u>	APP 0	- 2005		9/25/0	00			
XAMINER		APR 0	. 91	U.S. PAT	ENT DOCUMENTS	· . · · · · · · · · · · · · · · · · · ·			
INITIAL	REF	DOCUMENT NUMBER	MART BATE		NAME	CLASS	SUBCLASS	FILE	NG DATE ROPRIATE
	1	4,0/3,14/	6-23-87	Schaefe	r et al.	·		4-6-83	
+	2	4,736,453	4-5-88	Schloen	ner	·		12-10-	85
	3	4,885,694	12-5-89	Pray et	al.			4-29-8	7 .
11	4	5,111,392	5-5-92	Malin				6-9-89	
5	5	5,119,307	6-2-92	Blaha et	al.	· .		12-22-8	39
6	5	5,239,487	8-24-93	Horejsi	et al.			10-24-9	90
1,		5,293,640	3-8-94	Gunmar	et al.				<del></del>
8		5,307,261	4-26-94	Maki et	al.		T	6-28-91	
9	·	5,337,149	8-9-94	Kozah et	al.		1.	11-12-9	)2
10	0	5,339,184	8-16-94	Tang			<del> </del>	6-15-92	<del></del>
"		5,375,123	12-20-94	Andersso	on et al.			2-5-93	
				FOREIGN	PATENT DOCUMENT	s	<u></u>	<u> </u>	
14	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS		station
								YES	No
•								· ·-	
								<del></del>	
				OTHER DO	CUMENTS (Includin	ng Author, Title, Dat	te. Pertinent Para	a. Fic.)	
					· · · · · · · · · · · · · · · · · · ·			<del></del>	
							·		
IINER	Ç	NI	<del></del>	D	ATE CONSIDERED		7 7		
X	<u>(                                    </u>	citation considered, whether or n		$\geq \bot$	····	06/	25/6		

Docket Number (Optional)

# INFORMATION DISCLOSURE & (Use several sheets if necessary)

APR 0 5 2005

Docket Number (Optional) Application Number 02560038AA 09/668,145 Applicant(s)

T. Rappaport et al.

9/25/00

Piling Date

Group Art Unit

S. PATENT DOCUMENTS EXAMINER REF DOCUMENT NUMBER NAME INITIAL CLASS FILING DATE **SUBCLASS** IF APPROPRIATE 5,394,522 12 2-28-95 Sanchez-Frank et al. 9-13-93 13 5,450,615 9-12-95 Fortune et al. 12-22-93 14 5,458,123 10-17-95 Unger 4-29-94 5,465,390 15 11-7-95 Cohen 2-12-93 16 5,482,050 1-9-96 Smokoff et al. 2-17-94 17 5,485,568 1-16-96 Venable et al. 10-8-93 18 5,491,644 2-13-96 Pickering et al. 9-7-93 19 5,491,837 2-13-96 Haartsen 3-7-94 5,493,679 20 2-20-96 Virgil et al. 10-29-93 21 5,515,269 5-7-96 Willis et al. 11-8-93 22 5,528,518 6-18-96 Bradshaw et al. 10-25-94 FOREIGN PATENT DOCUMENTS REF DOCUMENT NUMBER DATE Trandatisu COUNTRY SUBCUASS CLASS YES NO

OTHER DOCUMENTS

(Including Author, Title, Date. Pertinent Pages. Etc.)

EXAMINER.

DATE CONSIDERED

EXAMINER: Initial if diation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

### Docket Number (Optional) Application Number 02560038AA i 09/668.145 INFORMATION DISCLOSURE C. FATZON Applicant(s) (Use several sheets if necessary) T. Rappaport et al. Filing Date APR 0 5 2005 Group Art Unit 9/25/00 U.S. PATENT DOCUMENTS TRAU EXAMINER DOCUMENT NUMBER DATE FILING DATE NAME . CLASS SUBCLASS INITIAL IF APPROPRIATE 5,539,665 7-23-96 Lamming et al. 7-25-94 5,553,312 9-3-96 Gattey et al. 6-20-94 5,553,620 25 9-10-96 Snider et al. 5-2-95 26 5.555,354 9-10-96 Strasnick et al. 3-23-93 5,561,841 27 10-1-96 Markus 5,564,070 28 10-8-96 Want et al. 7-30-93 5,594,946 29 1-14-97 Menich et al. 2-28-95 5,598,532 30 1-28-97 Liron 10-21-93 31 5,625,827 4-29-97 Krause et al. 12-23-94 5,636,344 6-3-97 Lewis 8-22-91 5,689,355 11-18-97 Okubo et al. 7-1-96 FOREIGN PATENT DOCUMENTS DOCUMENT NUMBER DATE Translation COUNTRY CLASS SUBCLASS YES OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with pext communication to applicant.

DATE CONSIDERED

EXAMINER

Application Number 02560038AA 09/668,145 INFORMATION DISCLOSURGE Applicant(s) (Use several sheets) necessary) T. Rappaport et al. Filing Date Group Art Unit APR 0 5 2005 9/25/00 **U.S. PATENT DOCUMENTS** EXAMINER DOCUMENT NUMBER TRADE INITIAL NAME . CLASS FILING DATE SUBCLASS IF APPROPRIATE 5,761,093. 6-2-98 Urbish et al. 5-8-97 35 5,794,128 8-11-98 Brockel et al. 9-20-95 36 5,799,154 8-25-98 Kuriyan 6-27-96 37 5,809,282 8-15-98 Cooper et al 6-7-95 38 5,815,395 9-29-98 Hart et al. 6-29-95 39 5,828,960 10-27-98 Tang et al. 3-31-95 5,831,610 11-3-98 Tonelli et al. 2-23-96 41 5,832,389 11-3-98 Dent 4-3-96 42 5,861,887 1-19-99 Butler et al. 12-5-95 43 5,86.7,112 2-2-99 Kost 5-14-91 44 5,877,777 3-2-99 Colwell 4-7-97 FOREIGN PATENT DOCUMENTS REF DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS YES N0 OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) EXAMINER DATE CONSIDERED EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with rext communication to applicant.

Docket Number (Optional)

Form PTO-A820 (also form PTO-1449)

P09A/REV04 BEST AVAILABLE COPY

Patent and Trademark Office \* U.S. DEPARTMENT OF COMMERCE

		INF	DRMATION DISCLOSURI	E CALLTION		Docket Number (Optional) 025600384 Applicant(s)	4A ()	Application Numb	/668,145	
				الم الم	····	T. Rappaport et al. Filing Date 9/25/00		Group Art Unit		
_				3)	U.S. PAT	ENT DOCUMENTS				
	MINER ITIAL	REF	DOCUMENT PHANEER PART	DATE		NAME	CLASS	SUBCLASS	FILIN	IC DATE
7	<u>/</u>	45	5,878,328	3-2-99	Chawla	et al.			12-21-9	
÷	1	46	5,907,850	5-25-99	Krause	et al.			1-21-97	,
·		47	5,917,808	6-29-99	Kosbab				1-17-97	
	L	48 .	5,923,850	7-13-99	Barrou				6-28-96	<del></del>
		49	5,926,762	7-20-99	Arpec e	t al.			5-17-96	
		50	5,940,196	8-17-99	Piehler	et al.			5-16-97	
		51	5,945,976	8-31-99	Iwamur	a et al.			12-10-9	6
		512	5,948,055	9-7-99	Pulsipho	er et al.			8-29-96	
	·	53	5,949,335	9-7-99	Maynar	d			4-14-98	<del></del>
		54	5,949,988	9-7-99	Feisullin	et al.		<del> </del>	4-3-97	·
V		55	5.953,669	9-14-99	Stratis e	t al.			12-11-9	<del></del> 7
				<u> </u>	FOREIGN	PATENT DOCUMENTS				
		REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS		dation
									YES	NO
								1		
				· · · · · · · · · · · · · · · · · · ·	OTHER DO	OCUMENTS (Including	Author, Title, D	ute, Pertinent Pag	es, Etc.)	
		1								
							•	•		

EXAMINER

DATE CONSIDERED

EXAMINER: Initial a citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

(Use several sheets if necessary)

Docket Number (Optional) 02560038AA

Application Number

SUBCLASS

09/668,145

FILING DATE

8-16-95

12-31-96

4-24-97

7-1-96

8-27-97

7-31-97

1-7-98

12-10-96

11-6-98

4-18-97

IF APPROPRIATE

Applicant(s)

T. Rappaport et al.

Filing Date

Group Art Unit

9/25/00

		<u> </u>	Car.	OU.S. PATENT DOCUMENTS	
EXAMINER INITIAL	rev	DOCUMENT NUMBER	DATE	NAME	CLASS
9	56	5,963,867	10-5-99	Reynolds et al.	
	57	5,970,406	10-19-99	Komara	
	58	5,987,328	11-16-99	Ephremides et al.	<del>-  </del>

12-21-99

1-25-00

2-1-00

3-14-00

3-28-00

5-2-00

5-2-00

Hayball et al.		

6,032,105 2-29-00 Lee et al.

Casto

Tekinay Drysdale et al

Tognazzini

Heiska et al.

Kawas et al.

FOREIGN PATENT DOCUMENTS

 <del></del>			The state of the s					
REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Tran	Translation	
 						YES	NO	
						· .		
							<b> </b>	
 	<del></del>		•	l .	1 '		į .	

OTHER DOCUMENTS (Including Author, Title, Date, Pertissent Pages, Etc.)

EXAMPLER

59

65

6,006,021

6,018,625

6,021,316

6,038,547

6,044,273

6,058,102

6,058,262

DATE CONSIDERED

EXAMINER: Initial if distion considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citago considered. Include copy of this form with next communication to applicant. on if not in conformance and not

,,,	INFO	ORMATION DISCLOSUR	GUATION		02560038AA Applicant(s)		09	668,145	
'		(Use several sheets of nosse	F) E C		T. Rappaport et al.			•	
	•	APR 0	5 2005		Piling Date 9/25/00		Group Art Unit		<del></del>
	<b>,</b>	1	3/	U.S. PATE	ENT DOCUMENTS				
'EXAMINER INITIAL	REF	DOCUMENT NUMBER & IRA	DEMARKATE		NAME	CLASS	SUBCLASS	FILING I	
4	67	6,059,842	5-9-00	Dumaro	t et al.			4-14-98	MATE
	68	6,061,722	5-9-00	Lipa et s	al.			12-23-96	
	69	6,075,541	6-13-00	Maclino	vsky			11-7-97	<del></del>
	70	6,088,522	7-11-00	Lee et al				7-31-97	
	71	6,104,699	8-15-00	Holende	r et al.				
	72	6,108,309	8-22-00	Cohoe et	al.			12-8-97	
	73	6,111,857	8-29-00	Soliman	et al.			9-11-97	
	74	6,122,083	9-19-00	Ohta et a	ıl.	<del></del>		10-3-94	
	75	6,148,010	11-14-00	Sutton et	al.			6-24-98	
	76	6,199,032	3-6-01	Anderson	1 .			7-22-98	<del></del>
	77	6,204,813	3-20-0.1	Wadell e	t al.			2-20-98	
				FOREIGN	PATENT DOCUMENTS		. · · · · · · · · · · · · · · · · · · ·	· <del></del>	
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Franchet	
								YES	<u> </u>
						<del></del>			
_				<u> </u>					<del></del>
									<del></del>
				OTHER DO	CUMENTS (Including Aut	hor, Tüle, Dat	e, Pertinent Page	s, Etc.)	<del></del>
									<del></del>
					•				<del></del>
	1								
XAMINER	<u> </u>			D	ATE CONSIDERED /)	1/2	7/10		
KAMINER: náldered. Is	Initial i	if citation considered, whether or n	ot citation is in con	nformance wi	th MPEP Section 609; Draw ii	ne through ci	tation if not in co	nformance ar	ıd not
om PTO-Al	у даз тоги чта нем сонившисацов и вррисалс								
lso form P1		BEST AV	AILABLE	COP	Vot Patent	and Trademark	office · u.s. depail sheet 7	OF	

## Application Number 02560038AA 09/668,145 INFORMATION DISCLOSURE CÉTATION Applicant(s) T. Rappaport et al. (Use several sheets if necessary) APR 0 5 2005 Piling Date Group Art Unit 9/25/00 & TRADENES. PATENT DOCUMENTS EXAMINER DOCUMENT NUMBER DATE NAME . INITIAL FILING DATE CLASS SUBCLASS IF APPROPRIATE 78 6,208,833 3-27-01 Preschutti et al. 6-24-97 6,229,540 5-8-01 Tonelli et al. 10-13-98 6,253,086 6-26-01 Parantainen et al. 3-25-99 6,285,377 9-4-01 Greenbaum et al. 6-26-97 82 6,289,203 9-11-01 Smith et al. 2-25-98 83 6.317.599 11-13-01 Rappaport et al. 5-26-99 84 6,326,987 12-4-01 Alexander 12-19-00 6,330,005 85 12-11-01 Tonelli et al. 10-6-99 86 6,311,144 10-30-01 Abu El Ata 7-31-98 6,337,688 1-8-02 Berstis 1-29-99 98 6,338,031 1-8-02 Lee et al. 9-23-99 FOREIGN PATENT DOCUMENTS DOCUMENT NUMBER DATE COUNTRY CLASS Translation SUBCLASS YES OTHER DOCUMENTS (Including Author, Title, Date. Pertinent Pages, Etc.) examiner DATE CONSIDERED if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Form PTO-A820 POSA/REVO4 .

Docket Number (Optional)

# 02560038AA 09/668,145 Applicant(s) (Use several sheets if necessary) T. Rappaport et al. Filing Date Group Art Ualt APR 0 5 2005 9/25/00 U.E. PATENT DOCUMENTS DATE EXAMINER DOCUMENT NUMBER INITIAL NAME CLASS FILING DATE SUBCLASS IF APPROPRIATE 89 6,356,758 3-12-02 Almeida et al. 12-31-97 90 6,393,432 Flansburg et al, 5-21-02 6-2-99 91 6,408,312 6-18-02 Forthman et al. 8-30-99 92 6,442,507 8-27-02 Skidmore et al. 12-29-98 6,470,195 93 10-22-02 Meyer 10-31-00 94 6,487,417 11-26-02 Rossoni et al. 11-24-99 95 6,493,679 12-10-02 Rappaport et al. 5-26-99 96 6,496,290 12-17-02 Lee 12-17-98 97 6,499,006 12-24-02 Rappaport et al. 7-14-99 98 6,505,045 1-7-03 Hills et al. 4-10-00 5,586,254 12-17-96 Kondo FOREIGN PATENT DOCUMENTS REF DOCUMENT NUMBER DATE COUNTRY CLASS SURCLASS OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) EXAMINER DATE CONSIDERED MINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Docket Number (Optional)

Application Number

_					Docket Number (Optional)	-	Application Num	
*	INF(	ORMATION DISCLOSUR	E CO TION	<del>``</del>	02560038	<u>ua</u> ()		er 9/668,145
		(Usa several sheets if neces	sary)	· 45.	Applicant(s) T. Rappaport et al.			7000,145
<del></del>	· · · · ·		APR 0 5	2005	Filing Date		Group Art Unit	
	. •		E. A. D. OC.	ES PAT	9/25/00 ENT DOCUMENTS			
NTTIAL	REF	DOCUMENT NUMBER	PADEN	MA			<del></del>	
0	100	6,085,33.5	7-4-00	+	NAME	CLASS	SUBCLASS	FILING DATE
7	101	5,710,758	1-20-98	Djoko e			·	12-31-97
+	102	5,821,937	10-13-98	Soliman				9-29-95
H	103	5,774,669	<del></del>	Tonelli				8-12-96
	104	5,802,146	6-30-98	George	et al.			7-28-95
			9-1-98	Dulman			· .	11-22-95
$\dashv$		5,825,759	10-20-98	Liu			,	7-24-95
		5,845,124	12-1-98	Berman				5-1-96
			3-6-01	Anderson	1			7-22-98
		5,467,441	11-14-95	Stone et a	ıl.			10-6-94
1		6,243,772	6-5-01	Ghori et	al.		·	1-31-97
111	12 5	5,994,984	11-30-99	, Stancil et	al.	·		5-29-9;
	<del></del>						"	
	Ke F	CCC MAIN MAISTE	0.445		COL YERS	C1.55	STREET, ST.	F.4
				_				Vis So
_	_ _			Man de laggrupe de l'égle d'en e v = e dué par	tr-dador to proposessa and response top servings of a use to see			
$\downarrow$				·	·			
				<del></del>				
			· (	OTHER DOC	UMENTS (Incluition	thus Title 5		
				<del></del>		thor. Title, Date,	renuent Pages,	E(c.)
	1							
	2	h 0					•	
R	<del>  / .</del>	<del>\ \ /                                   </del>		-	· .		/	
Ž	_	M V	•	DAT	TE CONSIDERED	10/	~/	
	Hall Lake	tation considered, whether or not of this form with next communic			$\mathcal{O}$	4/7	25/0	$Q_{+}$
ER: Ini	man ruken	of this form with next communic	citation is in	DITTORNA I'L	MOUNC	/. / U	-	

	INFO	DRMATION DISCLOSUR (Use several sheets if neces	E CITATION  APR 0 5	Applicant(s) T. Rappaport et al.		Application Number 09	/668,145
			PARTE	Filing Date 9/25/00		Group Art Unit	
	:		& TRADE		•		
EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
4	113	5,977,851	11-2-99	Stancil et al.			IFAPPROPRIATE 11-13-97
1	IA.	5,755,072	5-26-98	Lingafelter		-	5-13-98
							<del> </del>
	·	·				<u> </u>	
	·	·	<del> </del>			<del>"</del>	
•							
				· · · · · · · · · · · · · · · · · · ·			
	·						
					<del>                                     </del>	1	
A			<u> </u>	FOREIGN PATENT DOCUMENTS		1	
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation
							YES NO
						<u> </u>	
		·					
				OTHER DOCUMENTS (Including	g Author, Title, Da	ue, Pertinent Page	ıs, Etc.)
A	,	From Bird's Eye Real-ti  REEE Transactions on A  Urban Enviroments for		ftware dated 6-30-02 opagation, Vol. 46, No. 8, August : ations" Leonard Piazzi and Henry			
MINER				DATE CONSIDERED	26/	25/1	5
ered. In	muttal (	citation considered, whether or opy of this torm with next commu	not citation is in co rulcation to applica	onformance with MPEP Section 609; Di unt.	aw line through c	itation if not in co	onformance and not
idered. In	===	citation epusideled, whether or opy of this torm with next commu	not citation is in co mication to applica	onformance with MPEP Section 609; Di	aw line through c	itation if not in co	onformance and

Docket Number (Optional)

• ·		Docket Number (Optional)	Application Number
INFO	RMATION DISCLOSURE CITATION	O2560038AA Applicant(s)	09/668,145
•	(Use several sheets if necessary)	T. Rappaport et al.	
٠.		Piling Date	Group Art Unit
EXAMINER		9/25/00	
INITIAL	OTHER DOCUMENTS (Including Author,	Title, Date, Pertinent Pages, Etc.)	
$\supset_{\Omega}$	P. Bahl, V. Padmanabhan, and A. Balachandra Lessons, " Microsoft Technical Report, April 20	n, "A Software System for Locating	Mobile Users: Design, Evaluation, at
			,
12			
2005	G. Durgin, T.S. Rappaport, H. Xu, Measureme, Homes and Trees at 5.85 GHz," IEEE Transact	nts and Models for Radio Path Loss	and Penetration Loss in and Around
, 2003		70, 10.	11, November 1998.
		· · ·	
MART	C.M. Peter Ho et al., "Antenna Effects on Indoo Wide-Band Propagation Model for In-Building Information Networks, Vol. 1, No. 1, 1994.	or Obstructed Wireless Channels and	a Deterministic Image-Based
3	Information Networks, Vol. 1, No. 1, 1994.	- or some Communication's Systems,	international Journal of Wireless
.	S. Kim et al., "Radio Propagation Measurement Environments at 908 MHZ and 1.9 GHz," IEEE	s and Predictions Using Three-dimer	nsional Ray Tracing in Urban
4			rgy, voi. 48, no. 3, may 1999
İ	T.S., Rappaport et al., "Use of Topographic Ma Satellite Coverage for Radio Detection and Trac MPRG-TR-95-14. Virginia Tech. September 199	ps with Building Information to Dete	ermine Antenna Placements and GF
5	MPRG-TR-95-14, Virginia Tech, September 199	5	G technical Keport
	R.K. Morrow, Jr. and T.S. Rappaport, "Getting	In," Wircless Review Magazine, Ma	rch 2000.
6		·	
į	Wireless Valley Communications, Inc., "SitePlan pp.5-148 to 5-156, 1999.	iner 3.16 for Windows 95/98/NT User	r's Manual," Software User's Manu
7			
	M Panissani et al. Ul-		
;	M. Panjwani et al., "Interactive Computation of Environments," IEEE Journal on Selected Areas	Coverage Regions for Wireless Commin Communications, Vol. 14, No. 3, 2	munication in Multifloored Indoor April 1996.
3			•
, <u></u>	L Piazzi and H L. Bertoni "Achievable Agreement	of Charles	
	L Piazzi and H.L. Bertoni, "Achievable Acurracy Transactions on Vehicular Technology, vol. 48, no	o. 3, May 1999.	ns in Residential Environments" IEE
,  9			
	T.S. Rappaport et al., "Wireless Communications   Magazine, May 2002.	Past Frants and a Passar D	. I yerro
	Magazine, May 2002.	. Last Events and a Puttire Perspect	ive", 1EEE Communications
10			
+-	T.S. Rappaport et al., "Radio Propagation Predic	tion Techniques and Computer Aide	d Chan I'm Nodel' o
11	T,S. Rappaport et al., "Radio Propagation Predic Embedded Wireless Microsystems," ARPA Annu 1994.	al Report, MPRG Technical Report	MPRG-TR-94-12, Virginia Tech, Ju
''			
.	T.S., Rappaport et al., "Use of Topographic Man-	s with Building Information to Deter	ming Antonna Blassmant C. W. di
.,	T.S., Rappaport et al., "Use of Topographic Map. Detection and Tracking in Urban Environments," 1995	MPRG Technical Report MPRG-TI	mine Antenna Placements for Radio R-95-14, Virginia Tech, November
112	1	•	
<b></b> _	) // /	DATE CONSIDERED	<del> </del>
X			
	SALVA SALVANIA	00/	10/19
NER: Initial (	f citation considered, whether or not citation is in conformand	ce with MPEP Section 609; Draw line thro	ugh citation if not in conformance and n

<b>)</b> •	INFOR	MATION DISCLOSURE ATION	02560038AA	09/668,145
		(Use several sheets if necessary)	Applicant(s) T. Rappaport et al.	•
			Filing Date	Group Art Unit
*EXAMIN		(William Do Carl Carl	9/25/00	
INITIA	<u> </u>	OTHER DOCUMENTS (Including Author,	Title, Date, Pertinent Pages, Etc.)	
0	13	D. Ullmo et al., "Wireless Propagation in Build Technology, Vol. 48, No. 3, May 1999.	lings: A Statistical Scattering Appro	ach," IEEE Transactions on Vehi
OVPE	6	TS Pappage United		
PR 0 5 201	05	T.S. Rappapoprt, "wireless Communications: P	rinciples and Practice" Second Editi	ion, Prentice Hall, 2002.
A TRADEMP	15	T.S Rappaport et al., "Use of Topographic Mag Satellite Coverage for Radio Detection and Trac Virginia Tech, September 1995.	os with Building Information to Dete king in Urban Environments," MPR	rmine AntennaPlacements and G G Technical Report MPRG-TR-9
	16	T.S. Rappaport et al., "Indoor Path Loss Measur produced for Motorola, December 16, 1997.	rement for Homes and Apartments a	t 2.4 and 5.85 GHz," private repo
		T.S. Rappaport, "Isolating Interference," Wirele	se Poviou Musouine M	***
	17-		Review Magazine, May 2000.	
<u> </u>	IN .	Slides from T.S. Rappaport and R. Skidmore, "In Wireless Solutions Conference and Exposition, Fe	troduction to In-Building Wireless 5 bruary 4, 2003.	Systems, " Infocast In-Building
	: 19	S. Sandhu, M.P. Koushik, and T.S. Rappaport "Pron Site Specific Propagation Prediction," MPRG	edicted Path Loss for Roslyn VA, Fit Technical Report MPRG-TR-94-20,	rst set of predictions for ORD Pre Virginia Tech, December 1964
	20	S. Sandhu, M.P. Koushik, and T.S. Rappaport, "P. Project on Site Specific Propagation Prediction," 3	redicted Path Loss for Roslyn VA, Fi MPRG Technical Report MPRC-TR	irst set of predictions for ORD 194-20. Virginia Tech, March 198
•••	21	S. Seidel et al., "Site-Specific Propagation Prediction Transactions on Vehicular Technology, Vol. 43, No.	on for Wireless In-Building Persona . 4, November 1994	l Communication Design, TEEE
	22	S. Shakkottai and T.S. Rappaport, "Research Chal Fifth International Symposium on Wireles Persona	llenges in Wireless Networks: A Tec I Multimedia Communications, Hon	hnical Overview," Proceeding of olulu, HI, October 2002.
>	23	fl. Sherali et al., "On the Optimal Location of Tran IEEE Journal on Selected Areas in Communications	smitters for Micro-cellular Rudio C s, Vol. Vol. 14, No. 3, pp. 662-673, M	ommunication System Design," lay 1996.
A	24 ·	R. Skidmorre et al., "A Comprehensive In-Building Bradley Department of Electrical Engineering, MPK Master's Thesis - unpublished by	and Microcellular Wireless Commu RG-TR-97-13, June 1997. Virginia Tech for 2 yea	nication System Design Tool" Th
MINER	7	$\bigcap$	DATE CONSIDERED	
MINED	3	tion considered, whether or not citation is in conformance with sorm with next communication to applicant.	(x) / 7	5/10
.vas.vE.Ri. IDI	us trcita	tion considered, whether or not citation is in conformance with the form with next communication to applicant.		_ TI / // \

		URE CITATION	, ' <u>'</u>	02560038AA		. 09/6	68,145
INFORM	ATION DISCLOS						00,145
٠.	(Use several sheets if no	ecessary).		Applicant(s) T. Rappaport et al.			
				Filing Date		Group Art Unit	
XAMINER		<u> </u>		9/25/00			•
INITIAL	OTHER DOC	CUMENTS (Includio	ng Author, Title,	Date, Pertinent Pages, Etc.)			
	R. Skidmore, et al. "Project Undate"	Russell Senate Of	fice Building	Propagation Study, Project pared for Office of the Ar	t Report fo	r Joseph R. Lor	ing & Associate
1/2/24	The special sp	Constitute # Ac	.0170000, pre	paren for Office of the Ar	chitect of th	e Capital, Janu	ary 19, 1997.
-							
0/2/	R. Skidmore, et al.	, Russell Senate Of	fice Building	Propagation Study, Projects of the Wireless Community Acc Contract # Acc	ct Report fo	or Joseph R. Lor	ring & Associat
P E 25,25	Office Building (R. of the Capital Feb.	SOB) and Associate	d Utility Tun	nels," AoC Contract # Ac	iunications :br96088, p	Environment of repared for Offi	the Russell Serice of the Archi
		• •	٠.				
5 2005	R. Torres et al, "C	INDOOR: An Engi	ineering Tool	for Planning and Design o No. 4 August 1999.	f Wireless	Systems in Encl	osed Spaces."
25		. I sobaBacion Mas.	azine, vui. 41,	110. 4 August 1999.			•,
ADEMARK 26		•	•				
	R. Skidmore et al., Multi-Floored Indo	Interactive Cover	age Region as	nd System Design Simulat " IEEE ICUPC Proceedin	ion for Wir	eless Communic	ation Systems
17		. Davidounicity.	MIT E IUS EM,		ıgs, 1996.		•
				<del></del>		<del></del>	
	! 		•	•			
	1						
	<u></u> .	•	•				
	T.S. Rappapo	rt et al., "	Radio Pro	pagation Predicti	on Tech	niques and	Computer-
e	1	rt et al., "I l Modeling fo 8, Virginia 1	or emmead	pagation Predicti ed Wireless Micro y 1995.	on Tech	niques and ," MPRG Tec	Computer- ch. Report
e	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and ," MPRG Ted	Computer- ch. Report
P	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and ," MPRG Ted	Computer- ch. Report
e	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and ," MPRG Te	Computer- ch. Report
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and ," MPRG Tec	Computer- ch. Report
P	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and ," MPRG Te	Computer- ch. Report
P	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and ," MPRG Tec	Computer- ch. Report
P	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer- ch. Report
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-
	1	~actild If	or emmead	ed Wireless Missa	on Tech	niques and	Computer-ch. Report
DYER .	1	~actild If	Fech, Jul	ed Wireless Missa	on Tech	niques and, "MPRG Tec	Computer- ch. Report
DYER A	1	~actild If	Fech, Jul	ed wireless Micro	on Tech	niques and, "MPRG Tec	Computer-ch. Report

, ,		02560038AA	09/668,145
INE	ORMATION DISCLOSURE C1. TION (Use several sheets if necessary)	Applicant(s) T. Rappaport et al.	
,		Filing Date 9/25/00	Group Art Unit
*EXAMINER INITIAL	OTHER DOCUMENTS (Including Author, Tu		OIP
	Company Web Page "Actix" www.actix.com pro	oduct name: E-NOS ( now E-AMS)	
	, nodade given		APR 0 5 2035
	Company Web Page " Agilent' www.agilent.com	product name: OPAS32	MADEMARKO
	no date given		
	Company Web Page " Agilent " www.agilent.com	product name: Wizard	
	no date given		
	Company Web Page " Comarco" www.edx.com p	product name: SignalPro	· · · · · · · · · · · · · · · · · · ·
	nodate given		
	Company Web Page " ComOpt" www. comopt.co	om. product name: CellOpt AFP	
·	no date given		
	Company Web Page " Lucent" www.bell-labs.com	product name: WiSE	
	no date given		
	Company Web Page " Ericsson" www.ericsson.com	m product name: TEMS Lite	and the state of the second sections and the second state of the second
	no date given		
	Company Web Page " Ericsson" www.ericsson.co	m product name: TEMS	a and a decident of the contract of the contra
	no date given		·
	Company Web Page " Marconi" www.marconi.com	m product name: PlaNET	de verme de l'annue de la company de l'annue de la company de la company de la company de l'annue d
	no date siver		
1	Company Web Page " Marconi" www.marconi.com	m product name: decibelPlanner	
	no date given		
	Company Web Page " Schema"www.schema.com	product name: Optimizer	
	no date zhier	•	
	Company Web Page " ScoreBoard" www.scoreboa	rd.com product name: ScoreBoard	
	no date give		
KAMINER /	$\rightarrow$ $\vee$ $\wedge$	DATE CONSIDERED /	7
	Ty A/L	06/25/	
XAMINER: Init nsidered. Include	ial if citation considered, whether or not citation is in conformance e copy of this form with next communication to applicant.	e with MPEP Section 609; Draw line throu	gh citation if not in conformance and not